# FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)

### OFFICE OF AIR QUALITY

# Consolidated Grain and Barge Company 5130 Port Road Jeffersonville, Indiana 47130

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F019-11348-00001			
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: Expiration Date:		

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#### SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

#### A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary grain elevator.

Authorized individual: Michael B. Hart

Source Address: 5130 Port Road, Jeffersonville, IN 47130 Mailing Address: 5130 Port Road, Jeffersonville, IN 47130

SIC Code: 2873 Source Location Status: Clark

County Status: Moderate for Ozone

Attainment for all other criteria pollutants

Source Status: Federally Enforceable State Operating Permit (FESOP)

Minor Source, under Emission Offset Rules; Minor Source, Section 112 of the Clean Air Act

Not 1 of 28 Source Categories

#### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

- (a) two (2) truck pits with maximum capacity of 20 tons each.
- (b) two (2) rail pits with maximum capacity of 2 tons each.
- (c) fourteen (14) storage bins identified as #1, #2, #3, #4, #5, #6, #7, #8, #9, #10, #11, #12, #13 and #14, with maximum grain storage capacities of 1900, 1900, 475, 1900, 1900, 350, 850, 350, 1900, 1900, 475, 1900, 1900 and 18200 tons respectively, using baghouse as control, and venting to the atmosphere.
- (d) four (4) storage bins identified as #1a, #2a, #3a and #4a, with a maximum capacity of 100 tons each.
- (e) two (2) receiving drag conveyors, with maximum capacity of 420 tons per hour each and are completely enclosed to control dust.
- (f) two (2) reclaim drag conveyors, with maximum capacity of 420 tons per hour each and are completely enclosed to control dust.
- (g) two (2) bucket elevators, with maximum capacity of 420 tons per hour each and are completely enclosed to control dust.
- (h) two (2) distributors, with maximum capacity of 420 tons per hour each and are completely enclosed to control dust.
- (i) fourteen (14) spouts, with maximum capacity of 420 tons per hour each and are completely enclosed to control dust.

- (j) one (1) belt conveyor, with maximum capacity of 560 tons per hour and is completely enclosed to control dust.
- (k) one (1) reclaim belt conveyor, with a maximum capacity of 560 tons per hour and is completely enclosed to control dust.
- (I) one (1) reclaim drag conveyor, with a maximum capacity of 560 tons per hour and is completely enclosed to control dust.
- (m) one (1) belt conveyor, with maximum capacity of 700 tons per hour and is covered to control dust.
- (n) one (1) barge spout, with maximum capacity of 700 tons per hour and is completely enclosed to control dust.
- (o) two (2) drag conveyors, with maximum capacity of 140 tons per hour each and are completely enclosed to control dust.
- (p) one (1) rail spouts, with maximum capacity of 420 tons per hour and are completely enclosed to control dust with dust sock on the end of the spout.
- (q) one (1) wet grain bucket elevator, with maximum capacity of 110 tons per hour and is completely enclosed to control dust.
- (r) two (2) drag conveyors, with maximum capacity of 110 tons per hour and are completely enclosed to control dust.
- (s) one (1) dry grain bucket elevator, with maximum capacity of 110 tons per hour and is completely enclosed to control dust.
- (t) two (2) spouts, with maximum capacity of 140 tons per hour and are completely enclosed to control dust.
- (u) one (1) continuous flow dryer, with maximum capacity of 80 tons per hour fired by Natural gas with 20 million Btu/hour capacity, with enclosure to control emissions.
- (v) one (1) belt conveyor, with a maximum capacity of 400 tons per hour.
- (w) two (2) Domes for storage of fertilizer and bulk products, with maximum capacity of 7500 tons of storage.
- (x) one (1) Warehouse for storage of bulk products, with a maximum capacity of 6000 tons of storage.
- (y) one (1) reversible belt conveyor, with a maximum capacity of 300 tons per hour and is completely enclosed to control dust.
- (z) one (1) radial belt conveyor stacker, with a maximum capacity of 300 tons per hour and is covered to control dust.
- (aa) three (3) hoppers with maximum capacity 40 tons for unloading of barges and loading of trucks and rail cars.
- (bb) one (1) conventional belt conveyor, with a maximum capacity of 300 tons per hour and is used to fill the auxiliary truck loading hopper.

- (cc) one (1) rail unloading pit with a maximum capacity of 2 tons which is choke fed to reduce dust. Material from this pit is removed by a 300 tons per hour inclined paddle drag conveyer and spout, which are totally enclosed to control dust.
- (dd) one (1) reclaim conveyor, with a maximum capacity of 300 tons per hour and is covered to control dust.

#### A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source does not currently have any insignificant activities, as defined in 326 IAC 2-7-1(21).

#### A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air quality (OAQ) for a Federally Enforceable State Operating Permit (FESOP).

#### A.5 Prior Permit Conditions

- (a) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits.
- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued.

#### SECTION B GENERAL CONDITIONS

#### B.1 Permit No Defense [IC 13]

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

#### B.2 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2, and 326 IAC 2-7) shall prevail.

#### B.3 Permit Term [326 IAC 2-8-4(2)]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

#### B.4 Enforceability [326 IAC 2-8-6]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

#### B.5 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

#### B.6 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

#### B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

## B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)] [326 IAC 2-8-5(a)(4)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management Permits Branch, Office of Air quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality.[326 IAC 2-8-4(5)(E)]
- (c) The Permittee may include a claim of confidentiality in accordance with 326 IAC 17. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

#### B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

#### B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit, except those specifically designated as not federally enforceable, is grounds for:
  - (1) Enforcement action;
  - (2) Permit termination, revocation and reissuance, or modification; and
  - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (c) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in condition B, Emergency Provisions.

#### B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a authorized individual of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

#### B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

(a) The Permittee shall annually submit a compliance certification report, which addresses the status of the source=s compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
  - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification:
  - (2) The compliance status;
  - (3) Whether compliance was continuous or intermittent;
  - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
  - (5) Such other facts as specified in Sections D of this permit, IDEM, OAQ, may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

#### B.13 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

#### B.14 Emergency Provisions [326 IAC 2-8-12]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:
  - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - Ouring the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
  - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone No.: 1-800-451-6027 (ask for Office of Air quality, Compliance

Section) or,

Telephone No.: 317-233-5674 (ask for Compliance Section)

Facsimile No.: 317-233-5967

Failure to notify IDEM, OAQ, by telephone or facsimile within four (4) daytime business hours after the beginning of the emergency, or after the emergency is discovered or reasonably should have been discovered, shall constitute a violation of 326 IAC 2-8 and any other applicable rules. [326 IAC 2-8-12(f)]

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management Compliance Branch, Office of Air quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
  - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
  - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

- (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
- (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

#### B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report.

The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
  - (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
  - (2) Failure to implement elements of the Preventive Maintenance Plan unless such failure has caused or contributed to a deviation.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

(c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

- B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]
  - (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
  - (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
    - (1) That this permit contains a material mistake.
    - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
    - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
  - (c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]
  - (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

#### B.17 Permit Renewal [326 IAC 2-8-3(h)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the Aauthorized individual@ as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, IN 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]
  - (1) A timely renewal application is one that is:
    - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

- (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (2) If IDEM, OAQ upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-8-9]

  If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as needed to process the application.

#### B.18 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

#### B.19 Operational Flexibility [326 IAC 2-8-15]

- (a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:
  - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
  - (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
  - (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
  - (4) The Permittee notifies the:

Indiana Department of Environmental Management Permits Branch, Office of Air quality

100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-8-15(b), (c)(1), and (d).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-8-15(a) and the following additional conditions:
  - (1) A brief description of the change within the source;
  - (2) The date on which the change will occur;
  - (3) Any change in emissions; and
  - (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

- (c) Emission Trades [326 IAC 2-8-15(c)]
  The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).
- (d) Alternative Operating Scenarios [326 IAC 2-8-15(d)]

  The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.

#### B.20 Permit Revision Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed 326 IAC 2 and 326 IAC 2-8-11.1.

#### B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

#### B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-11(b)(3)]

#### B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

#### SECTION C SOURCE OPERATION CONDITIONS

#### **Entire Source**

#### Emissions Limitations and Standards [326 IAC 2-8-4(1)]

#### C.1 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source=s potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

- (a) Pursuant to 326 IAC 2-8:
  - (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period. This limitation shall also satisfy the requirements of 326 IAC 2-3 (Emission Offset);
  - (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
  - (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.
- (b) Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), emissions of particulate matter (PM) from the entire source shall be limited to less than two hundred fifty (250) tons per twelve (12) consecutive month period.
- (c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided the source=s potential to emit does not exceed the above specified limits.
- (d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

#### C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3(a)(2)(A) and (B) are not federally enforceable.

#### C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.

#### C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

#### C.6 Operation of Equipment [326 IAC 2-8-5(a)(4)]

Except as otherwise provided by statute, rule or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

#### C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(d)(3), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.

#### C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
  - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
  - (2) If there is a change in the following:
    - (A) Asbestos removal or demolition start date;
    - (B) Removal or demolition contractor; or
    - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3). All required notifications shall be submitted to:
  Indiana Department of Environmental Management
  Asbestos Section, Office of Air quality
  100 North Senate Avenue, P.O. Box 6015
  Indianapolis, Indiana 46206-6015

The notifications do not require a certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) Procedures for Asbestos Emission Control
  The Permittee shall comply with the applicable emission control procedures in 326 IAC
  14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are
  applicable for any removal or disturbance of RACM greater than three (3) linear feet on
  pipes or three (3) square feet on any other facility components or a total of at least 0.75
  cubic feet on all facility components.
- (f) Indiana Accredited Asbestos Inspector
  The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator,
  prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to
  thoroughly inspect the affected portion of the facility for the presence of asbestos. The
  requirement that the inspector be accredited is federally enforceable.

#### Testing Requirements [326 IAC 2-8-4(3)]

#### C.9 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to: Indiana Department of Environmental Management Compliance Data Section, Office of Air quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

#### Compliance Requirements [326 IAC 2-1.1-11]

#### C.10 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

#### Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

#### C.11 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Data Section, Office of Air quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule with full justification of the reasons for inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Unless otherwise specified in the approval for the new emissions unit, compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

#### C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing performed required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63 or other approved methods as specified in this permit.

## C.13 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)] [326 IAC 2-8-5(1)]

- (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.
- (b) Whenever a condition in this permit requires the measurement of a flow rate, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.
- (c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

#### Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

#### C.14 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68; or
- (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and

All documents submitted pursuant to this condition shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

#### C.15 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. The compliance monitoring plan can be either an entirely new document, consist in whole of information contained in other documents, or consist of a combination of new information and information contained in other documents. If the compliance monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the documents in which the information is found. The elements of the compliance monitoring plan are:
  - (1) This condition;
  - (2) The Compliance Determination Requirements in Section D of this permit;
  - (3) The Compliance Monitoring Requirements in Section D of this permit;
  - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
  - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:
    - (A) Reasonable response steps that may be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
    - (B) A time schedule for taking reasonable response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to take reasonable response steps may constitute a violation of the permit.
- (c) Upon investigation of a compliance monitoring excursion, the Permittee is excused from taking further response steps for any of the following reasons:
  - (1) A false reading occurs due to the malfunction of the monitoring equipment. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.

- (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.
- (3) An automatic measurement was taken when the process was not operating.
- (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (e) All monitoring required in Section D shall be performed at all times the equipment is operating. If monitoring is required by Section D and the equipment is not operating, then the Permittee may record the fact that the equipment is not operating or perform the required monitoring.
- (f) At its discretion, IDEM may excuse the Permittee's failure to perform the monitoring and record keeping as required by Section D, if the Permittee provides adequate justification and documents that such failures do not exceed five percent (5%) of the operating time in any quarter. Temporary, unscheduled unavailability of qualified staff shall be considered a valid reason for failure to perform the monitoring or record keeping requirements in Section D.
- C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]
  - (a) When the results of a stack test performed in conformance with Section C Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
  - (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
  - (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

#### C.17 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

#### C.18 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The reports do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

#### **Stratospheric Ozone Protection**

#### C.19 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

(a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156

- (b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

#### **SECTION D.1**

#### **FACILITY OPERATION CONDITIONS**

#### Facility Description [326 IAC 2-8-4(10)]:

- (a) two (2) truck pits with maximum capacity of 20 tons each.
- (b) two (2) rail pits with maximum capacity of 2 tons each.
- (c) fourteen (14) storage bins identified as #1, #2, #3, #4, #5, #6, #7, #8, #9, #10, #11, #12, #13 and #14, with maximum grain storage capacities of 1900, 1900, 475, 1900, 1900, 350, 850, 350, 1900, 1900, 475, 1900, 1900 and 18200 tons respectively, using baghouse as control, and venting to the atmosphere.
- (d) four (4) storage bins identified as #1a, #2a, #3a and #4a, with a maximum capacity of 100 tons each.
- (e) two (2) receiving drag conveyors, with maximum capacity of 420 tons per hour each and are completely enclosed to control dust.
- (f) two (2) reclaim drag conveyors, with maximum capacity of 420 tons per hour each and are completely enclosed to control dust.
- (g) two (2) bucket elevators, with maximum capacity of 420 tons per hour each and are completely enclosed to control dust.
- (h) two (2) distributors, with maximum capacity of 420 tons per hour each and are completely enclosed to control dust.
- (i) fourteen (14) spouts, with maximum capacity of 420 tons per hour each and are completely enclosed to control dust.
- (j) one (1) belt conveyor, with maximum capacity of 560 tons per hour and is completely enclosed to control dust.
- (k) one (1) reclaim belt conveyor, with a maximum capacity of 560 tons per hour and is completely enclosed to control dust.
- (I) one (1) reclaim drag conveyor, with a maximum capacity of 560 tons per hour and is completely enclosed to control dust.
- (m) one (1) belt conveyor, with maximum capacity of 700 tons per hour and is covered to control dust.
- (n) one (1) barge spout, with maximum capacity of 700 tons per hour and is completely enclosed to control dust.
- (o) two (2) drag conveyors, with maximum capacity of 140 tons per hour each and are completely enclosed to control dust.
- (p) one (1) rail spouts, with maximum capacity of 420 tons per hour and are completely enclosed to control dust with dust sock on the end of the spout.
- (q) one (1) wet grain bucket elevator, with maximum capacity of 110 tons per hour and is completely enclosed to control dust.
- (r) two (2) drag conveyors, with maximum capacity of 110 tons per hour and are completely enclosed to control dust.

- (s) one (1) dry grain bucket elevator, with maximum capacity of 110 tons per hour and is completely enclosed to control dust.
- (t) two (2) spouts, with maximum capacity of 140 tons per hour and are completely enclosed to control dust.
- (u) one (1) continuous flow dryer, with maximum capacity of 80 tons per hour fired by Natural gas with 20 million Btu/hour capacity, with enclosure to control emissions.
- (v) one (1) belt conveyor, with a maximum capacity of 400 tons per hour.
- (w) two (2) Domes for storage of fertilizer and bulk products, with maximum capacity of 7500 tons of storage.
- (x) one (1) Warehouse for storage of bulk products, with a maximum capacity of 6000 tons of storage.
- (y) one (1) reversible belt conveyor, with a maximum capacity of 300 tons per hour and is completely enclosed to control dust.
- (z) one (1) radial belt conveyor stacker, with a maximum capacity of 300 tons per hour and is covered to control dust.
- (aa) three (3) hoppers with maximum capacity 40 tons for unloading of barges and loading of trucks and rail cars.
- (bb) one (1) conventional belt conveyor, with a maximum capacity of 300 tons per hour and is used to fill the auxiliary truck loading hopper.
- one (1) rail unloading pit with a maximum capacity of 2 tons which is choke fed to reduce dust.

  Material from this pit is removed by a 300 tons per hour inclined paddle drag conveyer and spout, which are totally enclosed to control dust.
- (dd) one (1) reclaim conveyor, with a maximum capacity of 300 tons per hour and is covered to control dust.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

#### Emission Limitations and Standards [326 IAC 2-8-4(1)]

#### D.1.1 FESOP Permit Content [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4, the conveyers, bucket elevators, spouts and storage bins should be operated only when Baghouse is in operation with control efficiency of 99.0% and all the enclosure covers are in place. The Particulate Matter with aerodynamic diameter less than 10 micron, shall be limited from different emission points as follows:

Operation	PM-10 emissions		
•	(lbs/hour)		
Truck Rail receiving and bin 1-13 loading	3.25		
Truck Rail receiving and Barge loading	3.55		
Truck Rail receiving and bin 14 loading	3.42		
Bin 1-13 unloading to rail	3.25		
Bin 14 unloading to barge	3.42		
Grain Drying	2.38		
Bulk handling system	3.55		
Total	22.83		

This will ensure limiting the PM10 emissions from the entire Source to below one hundred (100) tons per 12 months period the Part 70 Operating Permit applicability level.

#### D.1.2 Nonattainment area particulate limitations: specified [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2 (d) (2) (Particulate Emission Limitations), the source shall comply with the following:

- (a) The source shall provide for good housekeeping and maintenance procedures which is defined as those practices which would be followed by a prudent management in controlling, regulating, and maintaining clean and safe conditions of buildings and grounds. In particular, these practices are required to minimize the opportunity for particulate matter to become airborne and leave the property.
- (b) Good housekeeping practices shall be conducted in the following areas or operations:
  - (1) Areas to be swept and maintained clean in appearance shall include at a minimum: general grounds, yard and other open areas; floors, decks, hopper areas, loading areas, dust collectors, and all such areas of dust or waste concentration; and grain driers with respect to accumulated particulate matter.
  - (2) Cleanings or other collected waste material shall be handled and disposed of in such a manner that the area does not generate fugitive dust.
  - (3) Dust from driveways, access roads, and other areas of travel shall be controlled.
  - (4) Accidental spills and other accumulations shall be cleaned up as soon as possible but no later than completion of the day's operation.
- (c) Good equipment maintenance will be those procedures which eliminate or minimize emissions from equipment or a system caused by:
  - (1) Malfunctions.
  - (2) Breakdowns.
  - (3) Improper adjustment.
  - (4) Operation above rated or designed capacity.
  - (5) Not following designed operating specifications.
  - (6) Lack of good preventive maintenance care.
  - (7) Lack of critical and proper spare replacement parts on hand.
  - (8) Lack of properly trained and experienced personnel.
- (d) To insure the above good housekeeping and maintenance procedures, emissions from the affected areas, operations, equipment and systems shall not exceed twenty percent (20%) opacity as determined pursuant to 326 IAC 5-1.

#### D.1.3 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5-4 the source will control fugitive particulate matter emissions as follows:

- (a) Paved roads, unpaved roads, and parking lots: Fugitive particulate matter emissions resulting from paved roads, unpaved roads, and parking lots shall be controlled using one or more of the following measures:
  - (1) Paved roads and parking lots:
    - (A) Cleaning by vacuum sweeping.
    - (B) Flushing.
    - (C) An equivalent alternate measure.
  - (2) Unpaved roads and parking lots:
    - (A) Paving with a material such as asphalt or concrete.
    - (B) Treating with a suitable and effective oil or chemical dust suppressant approved by the commissioner. The frequency of application shall be on an as needed basis.

- (C) Spraying with water, the frequency of application shall be on an as needed basis.
- (D) Double chip and seal the road surface and maintain on an as needed basis.
- (E) An equivalent alternate measure.
- (b) Open aggregate piles:
  - (1) Measures to control fugitive particulate matter emissions shall be required for open aggregate piles consisting of material such as, but not limited to, sand, gravel, stone, grain, and coal and which material is finer than two hundred (200) mesh size equal to or greater than one percent (1%) by weight. Open aggregate material mesh size shall be determined by the "American Association of State Highway and Transportation Officials Test Method T27-74," or other equivalent procedures acceptable to the commissioner.
  - Fugitive particulate matter emissions resulting from open aggregate piles consisting of such material as, but not limited to, sand, gravel, stone, grain, and coal shall be controlled using one or more of the following measures:
    - (A) Cleaning the area around the perimeter of the aggregate piles.
    - (B) Application of a suitable and effective oil or other dust suppressant on an as needed basis.
    - (C) An equivalent alternate measure.
- (c) Fugitive particulate matter emissions resulting from outdoor conveying of aggregate material such as, but not limited to, sand, gravel, stone, grain, and coal, by equipment such as belt conveyors and bucket elevators shall be controlled using one or more of the following measures:
  - (1) Enclosing the conveyor belt totally on the top and sides as needed to minimize visible emissions. Also, if needed, exhausting emissions to particulate control equipment during operation of conveyor.
  - (2) Applying water or suitable and effective chemical dust suppressant at the feed and/or intermediate points as needed to minimize visible emissions.
  - (3) An equivalent alternate measure.
- (d) Fugitive particulate matter emissions resulting from the transferring of aggregate material shall be controlled using one or more of the following measures:
  - (1) Minimizing the vehicular distance between the transfer points.
  - (2) Enclosing the transfer points and if needed exhausting emissions to particulate control equipment during the operation of the transferring system.
  - (3) Application of water or suitable and effective chemical dust suppressant as needed to minimize visible emissions.
  - (4) An equivalent alternate measure.
- (e) Fugitive particulate matter emissions resulting from transportation of aggregate material by truck, front end loaders, or similar vehicles shall be controlled using one or more of the following measures:
  - (1) Use of completely enclosed vehicles.
  - (2) Tarping the vehicle.
  - (3) Maintaining the vehicle body in such a condition that prevents any leaks of aggregate material.
  - (4) Spraying the materials in the vehicle with a suitable and effective dust suppressant.
  - (5) An alternate measure.
- (f) Fugitive particulate matter emissions resulting from the loading and unloading operations of the material from storage facilities such as bins, hoppers, and silos, onto or out of vehicles, shall be controlled using one or more of the following measures:
  - (1) Enclosure of the material loading/unloading area.
  - (2) Total or partial enclosure of the facility and exhausting of emissions to particulate collection equipment. Such equipment shall be approved by the board.
  - (3) Spraying with water or suitable and effective chemical dust suppressant as needed to minimize visible emissions.

- (4) Reduction of free fall distance.
- (5) An equivalent alternate measure.

#### D.1.4 Particulate Emission Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, particulate emissions from the grain and bulk receiving, storage and loading system for truck, rail car and barge shall be limited by the following equation:

 $E = 55.0 P^{0.11} - 40$  (for process weights greater than 60,000 lbs/hr)

where E = maximum allowable PM emission rate (lbs/hr)

P = process weight (tons/hr)

The results for different operations are shown in the table:

Operation	Process Weight	Allowable PM emission	
•	(tons/hour)	rate (lbs/hour)	
Truck Rail receiving and bin	420.00	66.89	
1-13 loading			
Truck Rail receiving and	700.00	73.06	
Barge loading			
Truck Rail receiving and bin	560.00	70.32	
14 loading			
Bin 1-13 unloading to rail	420.00	66.89	
Bin 14 unloading to barge	560.00	70.32	
Grain Drying	80.00	49.06	
Bulk handling system	700.00	73.06	
Total		469.60	

The baghouse should be in operation and enclosures should be in place for achieving controls at all times for grain receiving, storage, drying and loading system for truck, rail car and barge operation to comply with the requirements of 326 IAC 6-3-2.

#### D.1.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

#### **Compliance Determination Requirements**

#### D.1.6 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM (or local agency), compliance with the PM and PM-10 limits specified in Condition C.1, D.1.1 and D.1.4 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

#### D.1.7 Particulate Matter (PM)

In order to comply with D.1.1 and D.1.4, the baghouse and enclosure for the conveyor for PM control shall be in operation and control emissions from the grain receiving, storage and loading system for truck, rail car and barge at all times that the grain receiving, storage and loading system for truck, rail car and barge are in operation.

#### D.1.8 Visible Emissions Notations

- (a) Visible emission notations of the baghouse stack exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C Compliance Monitoring Plan Failure to Take Response Steps, shall be considered a violation of this permit.

#### D.1.9 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the grain handling process, at least once per shift when the grain handling process is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 1.5 and 3.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instruments Specifications, of this permit, shall be subject to approval by IDEM, OAQ and shall be calibrated at least once every six (6) months.

#### D.1.10 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the grain handling process when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

#### D.1.11 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

#### Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

#### D.1.12 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1. the Permittee shall maintain records of visible emission notations of the Baghouse stack exhaust once per shift.
- (b) To document compliance with Condition D.1.4, the Permittee shall maintain the following:
  - Once per shift records of the following operational parameters during normal operation when venting to the atmosphere:
    - (A) Inlet and outlet differential static pressure; and
    - (B) Cleaning cycle operation.
- (c) To document compliance with Condition D.1.1, the Permittee shall maintain records of the results of the inspections required under Condition D.1.9 and the dates the vents are redirected.
- (d) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

#### D.1.13 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 and D.1.4 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

## FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name:	Consolidated Grain and Barge Company
Source Address:	5130 Port Road, Jeffersonville, IN 47130
Mailing Address:	5130 Port Road, Jeffersonville, IN 47130
FESOP No ·	F019-11348-0001

This	certification shall be included when submitting monitoring, testing reports/results
	or other documents as required by this permit.

Please check what document is being certified:

- 9 Annual Compliance Certification Letter
- 9 Test Result (specify)
- 9 Report (specify)
- 9 Notification (specify)
- 9 Affidavit (specify)
- 9 Other (specify)

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
Signature:
Printed Name:
Title/Position:
Date:

#### INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT **OFFICE OF AIR QUALITY COMPLIANCE BRANCH** P.O. Box 6015

100 North Senate Avenue Indianapolis, Indiana 46206-6015 Phone: 317-233-5674 Fax: 317-233-5967

#### FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) **EMERGENCY OCCURRENCE REPORT**

Source Name: Consolidated Grain and Barge Company Source Address: 5130 Port Road, Jeffersonville, IN 47130 5130 Port Road, Jeffersonville, IN 47130 Mailing Address:

FESOP No.: F019-11348-00001

#### This form consists of 2 pages

Page 1 of 2

`		
1	This	is

an emergency as defined in 326 IAC 2-7-1(12)

CThe Permittee must notify the Office of Air quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and

CThe Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile

Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

If any of the following are not applicable, mark N/A
Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A	Page 2 of 2
Date/Time Emergency started:	
Date/Time Emergency was corrected:	
Was the facility being properly operated at the time of the emergency? Y N Describe:	
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>X</sub> , CO, Pb, other:	
Estimated amount of pollutant(s) emitted during emergency:	
Describe the steps taken to mitigate the problem:	
Describe the corrective actions/response steps taken:	
Describe the measures taken to minimize emissions:	
If applicable, describe the reasons why continued operation of the facilities are necessary imminent injury to persons, severe damage to equipment, substantial loss of capital involved or raw materials of substantial economic value:	

Form Completed by: Title / Position:

Date: Phone:

A certification is not required for this report.

#### INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT **OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION**

#### FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name:	Consolidate	ed Grain and Ba	irge Company	/		
Source Address:		Road, Jeffersonv				
Mailing Address:		Road, Jeffersony	ville, IN 47130	)		
FESOP No.:	F019-1134	8-00001				
N	Months:	to	Ye	ear:		
						Page 1 of 2
This report is an at report shall be sub date(s) of each dereported. Deviation according to the so report. Additional box marked INO de	mitted quarterly viation, the prob as that are requi chedule stated in pages may be a	based on a cale able cause of the red to be reported the applicable ttached if neces	endar year. A ne deviation, a ed by an appl requirement a ssary. If no de	Any deviation and the resticable required in the contraction of the co	on from the r ponse steps uirement sha need to be i	requirements, the taken must be all be reported notuded in this
9 NO DEVIATION	S OCCURRED	THIS REPORTI	NG PERIOD.			
9 THE FOLLOWIN	IG DEVIATIONS	S OCCURRED 1	THIS REPOR	TING PER	RIOD	
Permit Requireme	ent (specify perr	mit condition #)				
Date of Deviation	:		Duration	of Deviation	on:	
Number of Deviat	ions:					
Probable Cause o	of Deviation:					
Response Steps	Taken:					
Permit Requireme	ent (specify perr	mit condition #)				
Date of Deviation	:		Duration	of Deviation	on:	
Number of Deviat	ions:					
Probable Cause of	of Deviation:					
Response Steps	Taken:					

Phone:

Page 2 of 2

	Page 2 01 2
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Form Completed By:	
Title/Position:	
Date:	

Attach a signed certification to complete this report.

# Indiana Department of Environmental Management Office of Air Quality

# Technical Support Document (TSD) for a Federally Enforceable Operating Permit (FESOP)

#### **Source Background and Description**

Source Name: Consolidated Grain and Barge Company Source Location: 5130 Port Road, Jeffersonville, IN 47130

County: Clark

SIC Code: 2873 and 1474
Operation Permit No.: F019-11348-00001
Permit Reviewer: Gurinder Saini

The Office of Air Quality (OAQ) has reviewed a FESOP application from Consolidated Grain and Barge Company relating to the operation of a grain elevator and bulk handling facilities.

#### **Permitted Emission Units and Pollution Control Equipment**

The Source consists of the following permitted emission units and pollution control devices:

- (a) two (2) truck pits with maximum capacity of 20 tons each.
- (b) two (2) rail pits with maximum capacity of 2 tons each.
- (c) fourteen (14) storage bins identified as #1, #2, #3, #4, #5, #6, #7, #8, #9, #10, #11, #12, #13 and #14, with maximum grain storage capacities of 1900, 1900, 475, 1900, 1900, 350, 850, 350, 1900, 1900, 475, 1900, 1900 and 18200 tons respectively, using baghouse as control, and venting to the atmosphere.
- (d) four (4) storage bins identified as #1a, #2a, #3a and #4a, with maximum capacity of 100 tons each.
- (e) two (2) receiving drag conveyors, with maximum capacity of 420 tons per hour each and are completely enclosed to control dust.
- (f) two (2) reclaim drag conveyors, with maximum capacity of 420 tons per hour each and are completely enclosed to control dust.
- (g) two (2) bucket elevators, with maximum capacity of 420 tons per hour each and are completely enclosed to control dust.
- (h) two (2) distributors, with maximum capacity of 420 tons per hour each and are completely enclosed to control dust.
- (i) fourteen (14) spouts, with maximum capacity of 420 tons per hour each and are completely enclosed to control dust.

- (j) one (1) belt conveyor, with a maximum capacity of 560 tons per hour and is completely enclosed to control dust.
- (k) one (1) reclaim belt conveyor, with a maximum capacity of 560 tons per hour and is completely enclosed to control dust.
- (I) one (1) reclaim drag conveyor, with a maximum capacity of 560 tons per hour and is completely enclosed to control dust.
- (m) one (1) belt conveyor, with a maximum capacity of 700 tons per hour and is covered to control dust.
- (n) one (1) barge spout, with a maximum capacity of 700 tons per hour and is completely enclosed to control dust.
- (o) two (2) drag conveyors, with maximum capacity of 140 tons per hour each and are completely enclosed to control dust.
- (p) one (1) rail spouts, with a maximum capacity of 420 tons per hour and is completely enclosed to control dust with dust sock on the end of the spout.
- (q) one (1) wet grain bucket elevator, with a maximum capacity of 110 tons per hour and is completely enclosed to control dust.
- (r) two (2) drag conveyors, with maximum capacity of 110 tons per hour and are completely enclosed to control dust.
- (s) one (1) dry grain bucket elevator, with a maximum capacity of 110 tons per hour and is completely enclosed to control dust.
- (t) two (2) spouts, with maximum capacity of 140 tons per hour and are completely enclosed to control dust.
- (u) one (1) continuous flow dryer, with a maximum capacity of 80 tons per hour fired by Natural gas with 20 million Btu/hour capacity, with enclosure to control emissions.

#### **Unpermitted Emission Units and Pollution Control Equipment**

The source also consists of the following unpermitted facilities/units:

- (a) one (1) belt conveyor, with a maximum capacity of 400 tons per hour.
- (b) two (2) Domes for storage of fertilizer and bulk products, with maximum capacity of 7500 tons of storage.
- (c) one (1) Warehouse for storage of bulk products, with a maximum capacity of 6000 tons of storage.
- (d) one (1) reversible belt conveyor, with a maximum capacity of 300 tons per hour and is completely enclosed to control dust.
- (e) one (1) radial belt conveyor stacker, with a maximum capacity of 300 tons per hour and is covered to control dust.

- (f) three (3) hoppers with maximum capacity 40 tons for unloading of barges and loading of trucks and rail cars.
- (g) one (1) conventional belt conveyor, with a maximum capacity of 300 tons per hour and is used to fill the auxiliary truck loading hopper.
- (h) one (1) rail unloading pit with a maximum capacity of 2 tons which is choke fed to reduce dust. Material from this pit is removed by a 300 tons per hour inclined paddle drag conveyer and spout, which are totally enclosed to control dust.
- (i) one (1) reclaim conveyor, with a maximum capacity of 300 tons per hour and is covered to control dust.

#### **Existing Approvals**

The Source has been operating under previous approvals including, but not limited to, the following:

(a) 10-11-89-0218, issued on January 22, 1986.

All conditions from previous approvals were incorporated into this FESOP except the following:

(a) 10-11-89-0218, issued on January 22, 1986.

Condition 5 : "That particulate matter emissions from the entire plant shall not exceed 15 tons per year".

Reason not incorporated: There is no rule reference for this limit in the permit.

#### **Enforcement Issue**

- (a) IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled *Unpermitted Emission Units and Pollution Control Equipment*.
- (b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

#### Recommendation

The staff recommends to the Commissioner that the FESOP be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete FESOP application for the purposes of this review was received on September 15, 1999. Additional information was received on January 2, 2001. There was no notice of completeness letter mailed to the Source.

#### **Emission Calculations**

See Appendix A page 1 through 6 of this document for detailed emissions calculations

#### **Potential To Emit for the Source**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as Athe maximum capacity of a stationary Source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a Source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.@

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)		
PM	3609.1		
PM-10	1101.4		
SO₂	0.1		
VOC	0.5		
CO	8.8		
NO <sub>x</sub>	7.4		

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM and PM-10 are greater than 100 tons per year. Therefore, the Source is subject to the provisions of 326 IAC 2-7.
- (b) Fugitive Emissions
  Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD and Emission Offset applicability.

#### Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Federally Enforceable State Operating Permit.

	Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO <sub>2</sub>	VOC	СО	NO <sub>X</sub>	HAPs
Grain Handling with no Barge loading	11.7	3.9	-	-	-	-	-
Grain Handling with Barge loading	23.1	6.6	-	-	-	-	-
Grain Drying	0.77	0.19	-	-	-	-	-
Natural Gas Combustion	0.2	0.7	0.1	0.5	7.4	8.8	-
Bulk Handling System	51.9	24.4	-	-	-	-	-

7							
1							
Total Emissions	87.7	35.9	0.1	0.5	7.4	8.8	_
	· · · · ·	00.0	•	0.0		0.0	

#### **County Attainment Status**

The Source is located in Clark County

oddice is located in t	bource is located in Glark Gounty.					
Pollutant	Status (attainment, maintenance attainment or unclassifiable; severe, moderate, marginal, or nonattainment)					
PM-10	Attainment					
SO <sub>2</sub>	Attainment					
$NO_2$	Attainment					
Ozone	Moderate					
CO	Attainment					
Lead	Attainment					

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and  $NO_X$  emissions are considered when evaluating the rule applicability relating to the ozone standards. Clark County has been designated as nonattainment for ozone.

#### **Federal Rule Applicability**

- (a) 40 CFR Part 60.300 through 60.304, Subpart DD This Source is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.300, Subpart DD). This rule applies to affected facilities at any grain terminal elevator or grain storage elevator that was constructed after August 3, 1978. Since this grain elevator does not have a permanent storage capacity that is greater than 2.5 million U.S. bushels and is not located at a wheat flour, wet corn, dry corn, or rice mill or a soybean extraction plant, it does not meet the definition of a grain terminal elevator or a grain storage elevator. Therefore, the requirements of 40 CFR Part 60.300, Subpart DD, do not apply.
- (b) There are no other New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this Source.
- (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this Source.

#### State Rule Applicability - Entire Source

#### 326 IAC 2-8-4 (FESOP Permit Content)

The Source has agreed to limit potential to emit of all criteria pollutants below 100 tons per year by using control devices. Therefore, pursuant to 326 IAC 2-8-4, the conveyers, bucket elevators, spouts and storage bins should be operated only when Baghouse is in operation with control efficiency of 99.0% and all the enclosure covers are in place. The Particulate Matter with aerodynamic diameter less than 10 micron, shall be limited from different emission points as follows:

Operation	PM-10 emissions
	(lbs/hour)
Truck Rail receiving and bin 1-13 loading	3.25
Truck Rail receiving and Barge loading	3.55
Truck Rail receiving and bin 14 loading	3.42
Bin 1-13 unloading to rail	3.25
Bin 14 unloading to barge	3.42
Grain Drying	2.38
Bulk handling system	3.55
Total	22.83

This will ensure limiting the PM10 emissions from the entire Source to below one hundred (100) tons per 12 months period the Part 70 Operating Permit applicability level.

#### 326 IAC 2-2 (Prevention of Significant Deterioration)

The particulate matter emissions from the entire source shall be limited below 250 tons per 12 months period. This will ensure that requirements of 326 IAC 2-2 do not apply to this source.

#### 326 IAC 2-6 (Emission Reporting)

This source is not subject to 326 IAC 2-6 (Emission Reporting), because, the potential to emit VOC and NOx is less than ten (10) tons per year and the potential to emit PM-10 is less than one hundred (100) tons per year. Therefore, the requirements of 326 IAC 2-6 do not apply.

#### 326 IAC 5-1 (Visible Opacity Limitations)

The source is located in Clark County but not in Jeffersonville Township. Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### 326 IAC 6-4 (Fugitive Dust Emissions)

This source is subject to 326 IAC 6-4 for fugitive dust emissions. Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), fugitive dust shall not be visible crossing the boundary or property line of a source. Observances of visible emissions crossing property lines may be refuted by factual data expressed in 326 IAC 6-4-2(1), (2) or (3).

#### 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)

This source had not received all necessary pre-construction approvals prior to December 15, 1985, the applicability date of this rule. Therefore, as per 326 IAC 6-5-1 (b), this source is subject to 326 IAC 6-5 for Fugitive Particulate matter emissions. Pursuant to 326 IAC 6-5-4 the source will control fugitive particulate matter emissions as follows:

- (a) Paved roads, unpaved roads, and parking lots:
  Fugitive particulate matter emissions resulting from paved roads, unpaved roads, and parking lots shall be controlled using one or more of the following measures:
  - (1) Paved roads and parking lots:
    - (A) Cleaning by vacuum sweeping.
    - (B) Flushing
    - (C) An equivalent alternate measure.

- (2) Unpaved roads and parking lots:
  - (A) Paving with a material such as asphalt or concrete.
  - (B) Treating with a suitable and effective oil or chemical dust suppressant approved by the commissioner. The frequency of application shall be on an as needed basis.
  - (C) Spraying with water, the frequency of application shall be on an as needed basis.
  - (D) Double chip and seal the road surface and maintain on an as needed basis
  - (E) An equivalent alternate measure.
- (b) Open aggregate piles:
  - (1) Measures to control fugitive particulate matter emissions shall be required for open aggregate piles consisting of material such as, but not limited to, sand, gravel, stone, grain, and coal and which material is finer than two hundred (200) mesh size equal to or greater than one percent (1%) by weight. Open aggregate material mesh size shall be determined by the "American Association of State Highway and Transportation Officials Test Method T27-74," or other equivalent procedures acceptable to the commissioner.
  - (2) Fugitive particulate matter emissions resulting from open aggregate piles consisting of such material as, but not limited to, sand, gravel, stone, grain, and coal shall be controlled using one or more of the following measures:
    - (A) Cleaning the area around the perimeter of the aggregate piles.
    - (B) Application of a suitable and effective oil or other dust suppressant on an as needed basis.
    - (C) An equivalent alternate measure.
- (c) Fugitive particulate matter emissions resulting from outdoor conveying of aggregate material such as, but not limited to, sand, gravel, stone, grain, and coal, by equipment such as belt conveyors and bucket elevators shall be controlled using one or more of the following measures:
  - (1) Enclosing the conveyor belt totally on the top and sides as needed to minimize visible emissions. Also, if needed, exhausting emissions to particulate control equipment during operation of conveyor.
  - (2) Applying water or suitable and effective chemical dust suppressant at the feed and/or intermediate points as needed to minimize visible emissions.
  - (3) An equivalent alternate measure.
- (d) Fugitive particulate matter emissions resulting from the transferring of aggregate material shall be controlled using one or more of the following measures:
  - (1) Minimizing the vehicular distance between the transfer points.
  - (2) Enclosing the transfer points and if needed exhausting emissions to particulate control equipment during the operation of the transferring system.
  - (3) Application of water or suitable and effective chemical dust suppressant as needed to minimize visible emissions.
  - (4) An equivalent alternate measure.
- (e) Fugitive particulate matter emissions resulting from transportation of aggregate material by truck, front end loaders, or similar vehicles shall be controlled using one or more of the following measures:
  - (1) Use of completely enclosed vehicles.
  - (2) Tarping the vehicle.
  - (3) Maintaining the vehicle body in such a condition that prevents any leaks of aggregate material.
  - (4) Spraying the materials in the vehicle with a suitable and effective dust suppressant.
  - An alternate measure.
- (f) Fugitive particulate matter emissions resulting from the loading and unloading operations of the material from storage facilities such as bins, hoppers, and silos, onto or out of vehicles, shall be controlled using one or more of the following measures:

- (1) Enclosure of the material loading/unloading area.
- (2) Total or partial enclosure of the facility and exhausting of emissions to particulate collection equipment. Such equipment shall be approved by the board.
- (3) Spraying with water or suitable and effective chemical dust suppressant as needed to minimize visible emissions.
- (4) Reduction of free fall distance.
- (5) An equivalent alternate measure.

#### State Rule Applicability - Individual Facilities

#### 326 IAC 6-1-2 (Nonattainment area particulate limitations: specified)

This Source is located in Clark County and has actual particulate matter emissions more than 10 tons per year. Further, the grain throughput at this Source is more than 15 million bushels per year. Therefore, pursuant to 326 IAC 1-2-33.2, this will classify as Grain Terminal Elevator. As the construction of this grain elevator commenced after January 13, 1977, therefore, the Source is only subject to rule 326 IAC 6-1-2 (d) (2) only. Pursuant to 326 IAC 6-1-2 (d) (2) (Particulate Emission Limitations), the Source shall comply with the following:

- (a) The Source shall provide for good housekeeping and maintenance procedures which is defined as those practices which would be followed by a prudent management in controlling, regulating, and maintaining clean and safe conditions of buildings and grounds. In particular, these practices are required to minimize the opportunity for particulate matter to become airborne and leave the property.
- (b) Good housekeeping practices shall be conducted in the following areas or operations:
  - (1) Areas to be swept and maintained clean in appearance shall include at a minimum: general grounds, yard and other open areas; floors, decks, hopper areas, loading areas, dust collectors, and all such areas of dust or waste concentration; and grain driers with respect to accumulated particulate matter.
  - (2) Cleanings or other collected waste material shall be handled and disposed of in such a manner that the area does not generate fugitive dust.
  - (3) Dust from driveways, access roads, and other areas of travel shall be controlled.
  - (4) Accidental spills and other accumulations shall be cleaned up as soon as possible but no later than completion of the day's operation.
- (c) Good equipment maintenance will be those procedures which eliminate or minimize emissions from equipment or a system caused by:
  - (1) Malfunctions.
  - (2) Breakdowns.
  - (3) Improper adjustment.
  - (4) Operation above rated or designed capacity.
  - (5) Not following designed operating specifications.
  - (6) Lack of good preventive maintenance care.
  - (7) Lack of critical and proper spare replacement parts on hand.
  - (8) Lack of properly trained and experienced personnel.
- (d) To insure the above good housekeeping and maintenance procedures, emissions from the affected areas, operations, equipment and systems shall not exceed twenty percent (20%) opacity as determined pursuant to 326 IAC 5-1.

#### 326 IAC 6-3-2 (Particulate Emission Limitations)

The grain and bulk receiving, storage, drying and loading system for truck, rail car and barge are subject to particulate matter limitations under 326 IAC 6-3-2. Pursuant to this rule, particulate emissions from the grain and bulk receiving, storage and loading system for truck, rail car and barge shall be limited by the following equation:

 $E = 55.0 P^{0.11} - 40$  (for process weights greater than 60,000 lbs/hr)

where E = maximum allowable PM emission rate (lbs/hr)

P = process weight (tons/hr)

The results for different operations are shown in the table:

Operation	Process Weight	Allowable PM emission
	(tons/hour)	rate (lbs/hour)
Truck Rail receiving	420.00	66.89
and bin 1-13 loading		
Truck Rail receiving	700.00	73.06
and Barge loading		
Truck Rail receiving	560.00	70.32
and bin 14 loading		
Bin 1-13 unloading to	420.00	66.89
rail		
Bin 14 unloading to	560.00	70.32
barge		
Grain Drying	80.00	49.06
Bulk handling system	700.00	73.06
Total		469.60

Total potential controlled PM emissions from the grain receiving, storage, drying and loading system for truck, rail car and barge are 35.9 tons per year and are less than the allowable emission rate of 2056.84 tons/year. Therefore, the baghouse should be in operation and enclosures should be in place for achieving controls at all times for grain receiving, storage, drying and loading system for truck, rail car and barge operation to comply with the requirements of 326 IAC 6-3-2.

326 IAC 8-7 (Specific VOC Reduction Requirements for Lake, Porter, Clark and Floyd Counties)

This rule does not apply to this Source because the Source's potential to emit VOC is less than 100 tons per year and source is located in Clark County. Therefore, this rule does not apply to this source.

#### **Compliance Requirements**

Permits issued under 326 IAC 2-8 are required to ensure that Sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the Source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a Source-s failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

- 1. The grain receiving, storage, drying and loading system for truck, rail car and barge has applicable compliance monitoring conditions as specified below:
  - (a) Visible emissions notations of the baghouse exhaust shall be performed during normal daylight operations once per shift. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously Anormal@means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.
  - (b) The Permittee shall record the total static pressure drop across the baghouse controlling the grain receiving, storage, drying and loading system for truck, rail car and barge, at least once per shift when the grain receiving, storage, drying and loading system for truck, rail car and barge is in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 1.5 to 3.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.
  - (c) An inspection shall be performed each calendar quarter of the baghouse.

    Defective bags shall be replaced. A record shall be kept of the results of the inspection and the number of bags replaced.

These monitoring conditions are necessary because the baghouse for the grain receiving, storage, drying and loading system for truck, rail car and barge must operate properly to ensure compliance with 326 IAC 6-3-2 (Process Operations) and 326 IAC 2-8 (FESOP).

#### Conclusion

The operation of this grain elevator shall be subject to the conditions of the attached proposed FESOP 019-11348-00001.

# Appendix A: Emissions Calculations Natural Gas Combustion Only MM BTU/HR <100

Column Grain Dryer

Company Name: Consolidated Grain & Barge Co.Inc.

Address City IN Zip: 5130 Port Road Jeffersonville

**CP**: 019-11348 **PIt ID**: 019-00001

Reviewer: Gurinder Saini

Date: 26-Apr-00

Heat Input Capacity Potential Throughput

MMBtu/hr MMCF/yr

20.0 175.2

#### Pollutant

	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.2	0.7	0.1	8.8	0.5	7.4

<sup>\*</sup>PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

#### Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

<sup>\*\*</sup>Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

# Appendix A: Emission Calculations Emissions Summary

Company Name: Consolidated Grain & Barge Co.Inc. Address City IN Zip: 5130 Port Road Jeffersonville

CP: 019-11348
PIt ID: 019-00001
Reviewer: Gurinder Saini
Date: 04-Jan-00

#### Potential Emissions (tons/year)

Em	issions Generating Act					
Pollutant	Grain Handling	Grain Handling	Grain Drying	Natural Gas	Bulk Handling	TOTAL
	Rail and truck	Barge		Combustion	Systems	
PM	1169.00	2311.00	77.00	0.20	51.90	3609.1
PM-10	396.25	660.00	20.00	0.70	24.40	1101.4
SO2	0.00	0.00	0.00	0.10	0.00	0.1
NOx	0.00	0.00	0.00	8.80	0.00	8.8
VOC	0.00	0.00	0.00	0.50	0.00	0.5
CO	0.00	0.00	0.00	7.40	0.00	7.4
HAPs	0.00	0.00	0.00	0.00	0.00	0.0
						•

Total emissions based on rated capacity at 8,760 hours/year.

## **Controlled Potential Emission (tons/year)**

	Emissions Generating Activity								
Pollutant	Grain Handling Rail and truck	Grain Handling Barge	Grain Drying	Natural Gas Combustion	Bulk Handling Systems	TOTAL			
PM	11.70	23.12	0.77	0.20	51.90	87.7			
PM-10	3.96	6.60	0.19	0.70	24.40	35.9			
SO2	0.00	0.00	0.00	0.10	0.00	0.1			
NOx	0.00	0.00	0.00	8.80	0.00	8.8			
VOC	0.00	0.00	0.00	0.50	0.00	0.5			
CO	0.00	0.00	0.00	7.40	0.00	7.4			
HAPs	0.00	0.00	0.00	0.00	0.00	0.0			
Total emissions b	ased on rated capacity	at 8,760 hours/year	r.						

## Appendix A: Emissions Calculations Grain Elevator Truck or Rail recieving and Rail loading Systems

Company Name: Consolidated Grain & Barge Co.Inc. Address City IN Zip: 5130 Port Road Jeffersonville

CP: 019-11348
PIt ID: 019-00001
Reviewer: Gurinder Saini
Date: 28-Apr-00

Maximum Grain Received (tons of grain handled or processed per hour) =

840.00

1. Choose one of the following emission factors for each process based on the type of operations conducted at the individual source. Enter each factor chosen in the shaded boxes\* below the table, and the emission factors will be automatically transferred to the emission calculation table.

UNLOADING/RECEIVING						
Straight Truck Hopper Truck Railcar					lcar	
PM	PM PM-10 PM PM-10				PM-10	
0.18	0.059	0.035 0.0078		0.032	0.0078	
UNLOADING/RECEIVING						
	PM =	0.18	PM-10 =	0.059		

SHIPPING					
Truck (un	Truck (unspecified) Railcar				
PM	PM-10	PM	PM-10		
0.086	0.029	0.027 0.0022			
SHIPPING					
PM =	0.027	PM-10 = 0.0022			

2. Indicate the number of steps in the headhouse/internal handling process because the emissions for each step must be included in the total PM and PM-10 emissions (i.e., if the headhouse and internal handling consists of the legs, a gallery belt, and a tripper/distributor, there are 3 steps in the headhouse/internal handling process).

Total number of steps =

Factor representing this source\* =

1

Resulting throughput for headhouse/internal handling in tons/hr (number of steps \* throughput) =

840.00

	UNLOADING/ RECEIVING		HEADHO INTERNAL I legs, belts, distri		STORAGE B	IN (VENT)***	SHIPPING		
	PM	PM-10	PM	PM-10	PM PM-10		PM	PM-10	
Emission Factor in lb/ton	0.18	0.059	0.061	0.034	0.05	0.0125	0.027	0.0022	
Potential Emissions in tons/yr	662.256	217.073	224.431	125.093	183.960	45.990	99.338	8.094	
Controls (overall % efficiency)	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	
Controlled Potential Emissions in tons/yr	6.623	2.171	2.244	1.251	1.840	0.460	0.993	0.081	

Total PM emissions 11.70 tons per year Total PM-10 emissions 3.96 tons per year

Some of the factors presented are based on controlled emission factors which were divided by (1-assumed control efficiency) so that uncontrolled emissions could be calculated. The cyclone control efficiency is assumed to be 90%.

#### Methodology

Emission factors are from AP 42 Table 9.9.1-1 Particulate Emission Factors for Grain Elevators (Supplement D, 5/98) (exceptions are noted)

Potential Emissions in ton/yr = Throughput (ton/hr)\* Emission factor (lb/ton) \* 8760 (hours/day) / 2000 (lbs/ton)

Controlled Potential Emissions in ton/yr = Throughput (ton/hr)\* Emission factor (lb/ton) \* 8760 (hours/day) / 2000 (lbs/ton)\* (1-Control Efficiency)

<sup>\*\*</sup> The PM-10 emission factors given are estimated by taking 25% of the filterable PM emission factor in accordance with AP-42 Section 9.9.1, Table 9.9.1-1, Footnote j.

<sup>\*\*\*</sup> The PM emission factor given is from the interim AP-42 Section 9.9.1 (11/95). The PM-10 emission factor given is assumed to be equivalent to the filterable PM emission factor since no data was given.

# Appendix A: Emissions Calculations Grain Elevator Truck or Rail recieving and Barge loading Systems

Company Name: Consolidated Grain & Barge Co.Inc. Address City IN Zip: 5130 Port Road Jeffersonville

CP: 019-11348
PIt ID: 019-00001
Reviewer: Gurinder Saini
Date: 28-Apr-00

#### Maximum Grain Received (tons of grain handled or processed per hour) =

1400.00

1. Choose one of the following emission factors for each process based on the type of operations conducted at the individual source. Enter each factor chosen in the shaded boxes\* below the table, and the emission factors will be automatically transferred to the emission calculation table.

UNLOADING/RECEIVING								
Straigh	nt Truck	Норре	r Truck	Railcar				
PM	PM-10	PM	PM-10	PM	PM-10			
0.18	0.059	0.035	0.0078	0.032	0.0078			
	UNLOADING/RECEIVING							
	PM =	0.18	PM-10 =	0.059				

	SHIPPING						
Truck (uns	specified)*	lcar					
PM	PM-10	PM	PM-10				
0.086	0.029	0.027	0.0022				
	SHIP	PING					
PM =	0.086	PM-10 =	0.0022				

\* using the worst case emission factors for shipping by truck as none available for barge loading

2. Indicate the number of steps in the headhouse/internal handling process because the emissions for each step must be included in the total PM and PM-10 emissions (i.e., if the headhouse and internal handling consists of the legs, a gallery belt, and a tripper/distributor, there are 3 steps in the headhouse/internal handling process).

Total number of steps =

Factor representing this source\* =

Resulting throughput for headhouse/internal handling in tons/hr (number of steps \* throughput) =

1400.00

	UNLOADING/ RECEIVING		HEADHOUSE AND INTERNAL HANDLING legs, belts, distributor, etc.)		STORAGE BIN (VENT)***		SHIPPING	
	PM	PM-10	PM	PM-10	PM	PM PM-10		PM-10
Emission Factor in lb/ton	0.18	0.059	0.061	0.034	0.05	0.0125	0.086	0.0022
Potential Emissions in tons/yr	1103.760	361.788	374.052	208.488	306.600	76.650	527.352	13.490
Controls (overall % efficiency)	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%
Controlled Potential Emissions in tons/yr	11.038	3.618	3.741	2.085	3.066	0.767	5.274	0.135

Total PM emissions 23.12 tons per year Total PM-10 emissions 6.60 tons per year

Some of the factors presented are based on controlled emission factors which were divided by (1-assumed control efficiency) so that uncontrolled emissions could be calculated. The cyclone control efficiency is assumed to be 90%.

#### Methodology

Emission factors are from AP 42 Table 9.9.1-1 Particulate Emission Factors for Grain Elevators (Supplement D, 5/98) (exceptions are noted)

Potential Emissions in ton/yr = Throughput (ton/hr)\* Emission factor (lb/ton) \* 8760 (hours/day) / 2000 (lbs/ton)

Controlled Potential Emissions in ton/yr = Throughput (ton/hr)\* Emission factor (lb/ton) \* 8760 (hours/day) / 2000 (lbs/ton)\* (1-Control Efficiency)

<sup>\*\*</sup> The PM-10 emission factors given are estimated by taking 25% of the filterable PM emission factor in accordance with AP-42 Section 9.9.1, Table 9.9.1-1, Footnote j.

<sup>\*\*\*</sup> The PM emission factor given is from the interim AP-42 Section 9.9.1 (11/95). The PM-10 emission factor given is assumed to be equivalent to the filterable PM emission factor since no data was given.

## Appendix A: Emissions Calculations Grain Drying

Company Name: Consolidated Grain & Barge Co.Inc.
Address City IN Zip: 5130 Port Road Jeffersonville

CP: 019-11348
PIt ID: 019-00001
Reviewer: Gurinder Saini
Date: lanuary 4, 200

Maximum Grain Received (tons of grain handled or processed per hour) =	80.00

1. Choose one of the following emission factors for each process based on the type of operations conducted at the individual source. Enter each factor chosen in the shaded boxes\* below the table, and the emission factors will be automatically transferred to the emission calculation table.

UNLOADING/RECEIVING					DRYING			SHIPPING			
Straigh	nt Truck	Норре	er Truck	Railcar		Column Dryer	Rack Dryer	Truck (unspecified)		Railcar	
PM	PM-10	PM	PM-10	PM	PM-10	PM	PM	PM	PM-10	PM	PM-10
0.18	0.059	0.035	0.0078	0.032	0.0078	0.22	3	0.086	0.029	0.027	0.0022
UNLOADING/RECEIVING				DRY	′ING	SHIPPING					
	PM =		PM-10 =			PM =	0.22	PM =		PM-10 =	

Factor representing this source\* =

2. Indicate the number of steps in the headhouse/internal handling process because the emissions for each step must be included in the total PM and PM-10 emissions (i.e., if the headhouse and internal handling consists of the legs, a gallery belt, and a tripper/distributor, there are 3 steps in the headhouse/internal handling process).

Total number of steps =

1

Resulting throughput for headhouse/internal handling in tons/hr (number of steps \* throughput) =

80.00

	UNLOADING/ RECEIVING				DRYING**		HEADHOUSE AND INTERNAL HANDLING (legs, belts, distributor, etc.)		STORAGE BIN (VENT)***		SHIPPING	
	PM	PM-10	PM	PM-10	PM	PM-10	PM	PM-10	PM	PM-10	PM	PM-10
Emission Factor in lb/ton	0	0	0	0	0.22	0.055	0	0	0	0	0	0
Potential Emissions in tons/yr	0.000	0.000	0.000	0.000	77.088	19.272	0.000	0.000	0.000	0.000	0.000	0.000
Controls (overall % efficiency)					99.00%	99.00%						
Controlled Potential Emissions in tons/yr	0.000	0.000	0.000	0.000	0.771	0.193	0.000	0.000	0.000	0.000	0.000	0.000

<sup>\*\*</sup> The PM-10 emission factors given are estimated by taking 25% of the filterable PM emission factor in accordance with AP-42 Section 9.9.1, Table 9.9.1-1, Footnote j.

Some of the factors presented are based on controlled emission factors which were divided by (1-assumed control efficiency) so that uncontrolled emissions could be calculated. The cyclone control efficiency is assumed to be 90%.

#### Methodology

Emission factors are from AP 42 Table 9.9.1-1 Particulate Emission Factors for Grain Elevators (Supplement D, 5/98) (exceptions are noted)

Potential Emissions in ton/yr = Throughput (ton/hr)\* Emission factor (lb/ton) \* 8760 (hours/day) / 2000 (lbs/ton)

Controlled Potential Emissions in ton/yr = Throughput (ton/hr)\* Emission factor (lb/ton) \* 8760 (hours/day) / 2000 (lbs/ton)\* (1-Control Efficiency)

<sup>\*\*\*</sup> The PM emission factor given is from the interim AP-42 Section 9.9.1 (11/95). The PM-10 emission factor given is assumed to be equivalent to the filterable PM emission factor since no data was given.

### Appendix A: Emissions Calculations Natural Gas Combustion Only MM BTU/HR <100

**Column Grain Dryer** 

Company Name: Consolidated Grain & Barge Co.Inc.

Address City IN Zip: 5130 Port Road Jeffersonville

CP: 019-11348

PIt ID: 019-00001

Reviewer: Gurinder Saini

Date: 02/10/2001

Heat Input Capacity Potential Throughput

MMBtu/hr MMCF/yr

20.0 175.2

#### Pollutant

	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.2	0.7	0.1	8.8	0.5	7.4

<sup>\*</sup>PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

#### Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

<sup>\*\*</sup>Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

#### Appendix A: Emissions Calculations Bulk Handling Systems

Company Name: Consolidated Grain & Barge Co.Inc.

Address City IN Zip: 5130 Port Road Jeffersonville

CP: 019-11348

Plt ID: 019-00001
Reviewer: Gurinder Saini
Date: 28-Apr-00

This source also handles fertilizer. Only recieving, storage and distribution is carried out at this location. No manufacturing activities are carried out. Therefore, the emission factors for Aggregate handling in AP-42 (fifth edition, 1/95) in Section 13.2.4 are applied to this process.

The particulate matter emissions created when the material is handled at this facility:

Ef=  $k*(0.0032)*[(U/5)^{1.3}/(M/2)^{1.4}]$ 

Where:

Ef=emission factor (lb/ton)

k=particle size multiplier (0.74 assumed for aerodynamic diameter <=100 micro meter

and 0.35 for aerodynamic diameter <=10 micro meter

U=mean wind speed (assumed 1.5 mph) M=material % moisture content (0.25%)

Efpm=  $0.74*(0.0032)*[(1.5/5)^{1.3}/(0.25/2)^{1.4}]$ 

Ef<sub>pm</sub> 0.009098

 $Ef_{pm10} = 0.35*(0.0032)*[(1.5/5)^{1.3}/(0.25/2)^{1.4}]$ 

Ef<sub>pm10</sub> 0.004303

#### Barge Unloading and Rail Loading

#### Particulate Matter Emissions:

Load in = 400 tons/hour \* 0.009098 lb/ton\* 1 ton/ 2000 pounds \* 8760 hours/year 15.9397

Load out = 300 tons/hour \* 0.009098 lb/ton\* 1 ton/ 2000 pounds \* 8760 hours/year 11.95477

Total PM emission = 27.89447

#### Particulate Matter less than 10 micron size (PM10) Emissions:

Load in = 400 tons/hour \* 0.004303 lb/ton\* 1 ton/ 2000 pounds \* 8760 hours/year 7.538856

Load out = 300 tons/hour \* 0.004303 lb/ton\* 1 ton/ 2000 pounds \* 8760 hours/year 5 654142

Total PM10 emission = 13.193

#### Rail Unloading and Loading

#### Particulate Matter Emissions:

Load in = 300 tons/hour \* 0.009098 lb/ton\* 1 ton/ 2000 pounds \* 8760 hours/year 11.95477

Load out = 300 tons/hour \* 0.009098 lb/ton\* 1 ton/ 2000 pounds \* 8760 hours/year 11.95477

Total PM emission = 23.90954

#### Particulate Matter less than 10 micron size (PM10) Emissions:

Load in = 300 tons/hour \* 0.004303 lb/ton\* 1 ton/ 2000 pounds \* 8760 hours/year 5.654142

Load out = 300 tons/hour \* 0.004303 lb/ton\* 1 ton/ 2000 pounds \* 8760 hours/year 5.654142

Total PM10 emission = 11.30828